

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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	IN THE UNITED STATES PATENT AND TRAI	DEMARK	K OFFICE TO THE PARTY OF THE PA)
In re a	application of)	7700	
Curtiss Mitchell Austin et al.)	GAU: 1731	
Ser. No. 09/709,009)	Examiner:	
Filed:	November 8, 2000)	Fiorilla	
For:	PROCESS ASSEMBLY UTILIZING FIXTURING	G)		
	MADE OF AN OPEN-CELL CERAMIC SOLID)		
	FOAM, AND ITS USE)		

RESPONSE TO OFFICE ACTION

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This application has been reviewed in light of the Office Action of February 26, 2003. Claims 1-20 are pending. Claims 16-20 are withdrawn from consideration, claims 10 and 12 are allowed (objected to), and claims 1-9, 11, and 13-15 are rejected. In response, the following remarks and attachments are submitted. Reconsideration of this application, as amended, is requested.

Restriction Requirement

Applicant affirms the election of the claims of Group I, claims 1-15, for prosecution, with traverse.

Applicant respectfully submits that the factual explanation presented for the

basis of the restriction really isn't on point. The explanation is that "...the process assembly can be used to process unsupported articles as well." The MPEP provision underlying the restriction requirement is phrased in terms of the "process as claimed" and the "apparatus as claimed". Claims 1 and 16 both require that the fixturing be used with a "supported article". If the process assembly were used to process an "unsupported article", then it would be outside the scope of claims 1 and 16, and the MPEP provision is not applicable. (As an aside, Applicant cannot image such a thing as an "unsupported article" in this context, because the "supported article" is simply the thing that requires support by the fixturing.) In any event, the rationale used to support the restriction requirement asserts a factual situation outside the claim scope.

Applicant asks that the Examiner reconsider and withdraw the restriction, and examine claims 16-20 as well.

Action on the Merits

Fixturing or tooling is widely used to position a supported article in a particular orientation or location, by itself or in relation to other articles, see the present Figure 1, for example. One of the problems in fixturing or tooling is that it often cannot sustain the elevated temperatures required in the processing of the supported article, or wears out too quickly. The present invention deals with the processing of a sacrificial ceramic to make a fixture, positioning the reacted ceramic fixture in relation to the supported article to produce a process assembly, and thereafter processing the process assembly as required for the supported article. It is Applicant's belief that none of the references deal with ceramic fixturing or tooling, and there is no basis in these four applied references for denying patentability of the recited fixturing approach and method.

Claims 1, 7, 8, 14, and 15 are rejected under 35 USC 102 as anticipated by Breslin. Applicant traverses this ground of rejection.

The following principle of law applies to sec. 102 rejections. MPEP 2131

provides: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the ... claim. The elements must be arranged as required by the claim..." [citations omitted] This is in accord with the decisions of the courts. Anticipation under section 102 requires 'the presence in a single prior art disclosure of all elements of a claimed invention arranged as in that claim.' Carella v. Starlight Archery, 231 USPQ 644, 646 (Fed. Cir., 1986), quoting Panduit Corporation v. Dennison Manufacturing Corp., 227 USPQ 337, 350 (Fed. Cir., 1985)

Thus, identifying a single element of the claim which is not disclosed in the reference is sufficient to overcome a Sec. 102 rejection.

Claim 1 recites in part:

"positioning the reacted ceramic fixture in relation to the supported article to produce a process assembly; and thereafter

processing the process assembly as required for the supported article."

Applicant can find no disclosure in Breslin of this limitation and, more generally, no disclosure of the use of the material of Breslin as a fixturing material. No identification of the asserted location of any such disclosure in Breslin is presented in the explanation of the rejection. Applicant therefore cannot be certain what statements in Breslin are relied upon for such anticipatory disclosure. If the rejection is maintained, Applicant asks that the Examiner identify the source of the anticipatory disclosure in Breslin, by column and line number.

Applicant asks that the Examiner reconsider and withdraw this ground of rejection.

Claims 1, 11, 13, 14, and 15 are rejected under 35 USC 102 as anticipated by

Claar. Applicant traverses this ground of rejection.

Claim 1 recites in part:

"furnishing a sacrificial ceramic fixture precursor having a shaped portion thereof shaped to receive a supported article in contact therewith; thereafter

contacting the sacrificial ceramic fixture precursor to a molten reactive metal for a period of time sufficient to permit the sacrificial ceramic fixture precursor and the reactive metal to react together, producing a reacted ceramic fixture comprising an open-cell solid foam of ceramic cell walls having an interconnected intracellular volume therebetween;"

The approach of Claar does not utilize a sacrificial ceramic fixture precursor to produce an open-cell solid foam, as far as Applicant can find. Claar produces a bonded structure, which is the opposite of what is desired in fixturing. A fixture is used to hold and position the supported article, but desirably does not bond to it so as to make their separation difficult at a later time when the supported article is to be removed from the fixture.

Claim 1 also recites in part:

"positioning the reacted ceramic fixture in relation to the supported article to produce a process assembly; and thereafter

processing the process assembly as required for the supported article."

Applicant can find no disclosure in Claar of this limitation and, more generally, no disclosure of the use of the material of Claar as a fixturing material. No identification of the asserted location of any such disclosure in Claar is presented in the

explanation of the rejection. Applicant therefore cannot be certain what statements in Claar are relied upon for such anticipatory disclosure. If the rejection is maintained, Applicant asks that the Examiner identify the source of the anticipatory disclosure in Claar, by column and line number.

Applicant asks that the Examiner reconsider and withdraw this ground of rejection.

Claims 1-6, 8, and 13-14 are rejected under 35 USC 103 as unpatentable over Gupta in view of Ten Eyck. Applicant traverses this ground of rejection.

The following principle of law applies to all sec. 103 rejections. MPEP 2143.03 provides "To establish <u>prima facie</u> obviousness of a claimed invention, <u>all claim</u> <u>limitations must be taught or suggested by the prior art</u>. <u>In re Royka</u>, 490 F2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)." [emphasis added] That is, to have any expectation of rejecting the claims over a single reference or a combination of references, each limitation must be taught somewhere in the applied prior art. If limitations are not found in any of the applied prior art, the rejection cannot stand</u>. In this case, the applied prior art references clearly do not arguably teach some limitations of the claims.

Claim 1 recites in part:

"contacting the sacrificial ceramic fixture precursor to a molten reactive metal"

Gupta does not teach this step. Gupta teaches the infiltration of silicon, but silicon is not a metal, to Applicant's knowledge. A review of dictionaries and reference books did not find any that describe silicon as a metal. To the contrary, the authoritative Hampel "Glossary of Chemical Terms", relevant pages attached, describes silicon as "...a nonmetal, like carbon..." The Wordsworth Dictionary of Science and Technology, relevant pages attached, describes silicon as a "nonmetallic element".

Even a general purpose dictionary such as Webster's Encyclopedic Unabridged Dictionary of the English Language, relevant pages attached, defines silicon as a "nonmetallic element". If this rejection is maintained, Applicant asks for some support for the implicit suggestion that silicon is a metal. Ten Eyck teaches doping of semiconductors with elements that may be metallic, but there is no use of a reactive metal or a molten reactive metal, as far as Applicant can tell. Neither of the references, nor the combination of their teachings, teaches this limitation.

Claim 1 also recites in part:

"positioning the reacted ceramic fixture in relation to the supported article to produce a process assembly; and thereafter processing the process assembly as required for the supported article."

Applicant can find no disclosure in either reference of this limitation and, more generally, no disclosure of the use of the material of either reference as a fixturing material. No identification of the asserted location of any such disclosure in either reference is presented in the explanation of the rejection. Applicant therefore cannot be certain what statements in the references are relied upon for such anticipatory disclosure. If the rejection is maintained, Applicant asks that the Examiner identify the source of the relied-upon teaching in the references, by column and line number.

Applicant asks that the Examiner reconsider and withdraw this ground of rejection.

Applicant has not addressed the dependent claims in these remarks, but the limitations of the dependent claims are in many cases also not taught by the art.

Claims 10 and 12 are objected-to, and Applicant requests permission to defer the writing of these claims to independent form. Applicant believes that such rewriting will not be necessary, in view of Applicant's belief that the applied references do not negate

the patentability of the independent claim.

Applicant submits that the application is now in condition for allowance.

Respectfully submitted,

Gregory O. Garmong

Reg. No. 29,382

Attorney for Applicant

GLOSSARY OF CHEMICAL TERMS

Clifford A. Hampel

Consulting Chemical Engineer
Editor, ENCYCLOPEDIA OF CHEMISTRY

AND

Gessner G. Hawley

Editor, CONDENSED CHEMICAL DICTIONARY Coeditor, ENCYCLOPEDIA OF CHEMISTRY



electrons, which are directly involved in chemical bonding. See also orbital; electron; Pauli exclusion principle.

shellac. An alcohol solution of a resin obtained from a unique type of tropical insect, especially in India. The unbleached type is called orange shellac due to its color. When dry it forms a hard, transparent coating and thus is used on furniture and other wood products as a finishing and protective coating. Its high electrical resistance makes it useful as an insulating coating. The name is derived from the same base as lacquer and is probably of Hindu origin.

sherardizing. See cementation.

shielding. Protection of personnel by placing adequate thicknesses of appropriate materials around nuclear reactors, and sources of high-energy x-rays and radioactive emanations. Lead is most frequently used for x- and gamma-ray protection because of its high density. Boron and cadmium are most effective as neutron absorbers. Such materials as hydraulic cements, polyethylene, paraffin, and water also afford considerable protection, but only in rather large amounts. See also absorption (3).

shortening. See cooking.

shortstop. A chemical compound used to stop a reaction at a predetermined point. Such agents are particularly useful in polymerization sequences in which it is not desirable for the reaction to go to completion. The term grew out of experimentation in high-polymer synthesis in the 1940s. Diethylhydroxylamine and sodium dimethyldithiocarbamate have been used.

Si Symbol for the element silicon; the name is said to be derived from the Latin word for flint.

silane. See silicon.

silica. The oxide of silicon, SiO₂; sand. See also silicon; silica gel.

silica gel. A porous solid material consisting of silica manufactured in pellets of various sizes; it is made by treating sodium silicate (water glass) with sulfuric acid. Its physical structure and uses are not unlike those of activated carbon. It has high adsorptive power for atmospheric moisture and finely divided solids and thus is largely used as a dehumidifier and clarifying agent and as a carrier for catalysts.

silicate. Any of a broad range of mineral compounds comprised of from one to six silica chains. These include many of the more familiar gemstones (zircon, garnet, beryl, emerald), as well as asbestos (magnesium silicate), mica, and various types of clay (aluminum silicate). A well-known synthetic silicate is sodium silicate, a water-soluble glass commonly called water glass. Silicates are used in the manufacture of water-softening agents (zeolites). See also silicon, water glass.

silicon. An element.

Symbol Si Atomic Wt. 28.086
State Solid Valence 4
Group IVA Isotopes 3 stable
Atomic No. 14

Silicon, m.p. 1420°C (2588°F), is the most abundant solid element, being second only to oxygen in prevalency; it rarely occurs in elemental form, virtually all of it existing as compounds (silicon dioxide, silicates, etc.). Silicon is a nonmetal, like carbon, to which it is chemically similar; it has the same valence and is next below carbon in the Periodic Table. Silicon forms single bonds with itself and with carbon, oxygen, hydrogen, and halogens, but it does not form double or triple bonds nor chains of more than six silicon atoms. This similarity to carbon accounts for its ability to form silanes (with hydrogen), siloxanes (with oxygen), and the industrially important silicone compounds (with oxygen and organic groups). Silicon is one of the few elements that have semiconducting properties. The most abundant compound is the dioxide (silica, sand) which is the basis of glass and a component of Portland cement: other important compounds are the tetrachloride, used in the preparation of various organosilicon products; the carbide (silica plus carbon); and the broad range of silicone products. In elemental form, silicon is used as an alloying agent in steel manufacture (ferrosilicon), and as a semiconductor, e.g., in solar cells. See also silicate; silicone; semiconductor.

silicon carbide. A chemical compound of carbon and silicon (SiC), trademarked "Carborundum." It is made by heating silica (sand) with coke in an electric furnace at temperatures of 1900-2600° C (3452-4712° F). It is an extremely hard, heat-resistant material which is a good conductor of heat and electricity. It is made as fine-ground particles, as fibers, and

The Wordsworth

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Dictionary of Science & Technology

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Wordsworth Reference

silanes

cal breakdown, in portable or fixed silos, of vegetable matter (grasses, clovers, pea haulms, beet tops etc.), with the admixture of diluted molasses, suitable acids (e.g. formic) etc. Also ensilage, the process of making such

allanes (Chem.): A term given to the silioon hydrides: silane, SiH., disilane H.Si.SiH., trisilane, H.Si.SiH.). SiH_ etc.

Blastic (Plastics). TN for a range of silicone rubbers Noted for very good heat resistance and a wide temperature range of application. Excellent chemical resistance and electrical properties.

ellencer (Autos.). An expansion-chamber fitted to the

exhaust pipe of an IC engine to dampen the noise of combustion. US muffler.

client period (Telecomm.), Stated period within each hour during which all marine transmissions must close down and listen on the international distress frequency of

500 kHz. when contamination by abraded steel must, be avoided. allica (Chem.). Dioxide ((IV) oxide) of silicon, SiO2, occurring in crystalline forms as quartz, cristobalite, tridymite; as cryptocrystalline chalcedony; as amorphous opal; and as an essential constituent of the silicate groups of minerals. Used in the manufacture of glass and refractory materials. Refractory materials containing a high proportion of silica (over 90%) are known as acid refractories (e.g. gannister), and are used in open-hearth and other metallurgical furnaces to resist high temperatures and attack by acid slags.

allica gel (Chem.), Hard amorphous granular form of hydrated silica, chemically inert but very hygroscopic. Used for absorbing water and vapours of solvents, especially in enclosed electronic equipment. When saturated, it may be regenerated by heat,

silica glass (Glass). See vitreous silica. silica glass (Min.). Fused quartz, occurring in shapeless masses on the surface of the Libyan Desert, in Moravia, in parts of Australia and elsewhere; believed to be of meteoritic origin. See tektites.

silics poisoning (Min.Ext.). Loading of resins used in ion-exchange process with silics, thus reducing the efficiency of reaction with desired ions.

silicates (Min.). The largest group of minerals, of widely different; and in some cases, extremely complex composition, but all composed of silicon, oxygen, and one or more metals, with or without hydrogen., we stand

siliceous deposits (Geol.). Those sediments, incrustations, or deposits which contain a large percentage of silica in one or more of its modes of occurrence. They may be chemically or mechanically formed, or may consist of the siliceous skeletons of organisms such as diatoms and Radiolaria. See also silicification.

siliceous sinter (Geol.), Cellular quartz or translucent to opaque opal, found as incrustations or fibrous growths and deposited from thermal waters containing silica or silicates in solution.

silicio acid (Chem.). An acid formed when alkaline silicates are treated with acids. Amorphous, gelatinous mass. Dissociates readily into water and silica: in.

silicides (Chem.). Compounds formed by the combination of silicon with other elements, chiefly metals. ellicitication (Geol.). The process by which silica is

introduced as a cement into rocks after their deposition. or as an infiltration or replacement of organic tissues or of other minerals such as calcite, See also novaculite: ellicole (Bat.). A plant which grows on soils rich in silica

and usually acid in reaction. tions of the god of

ailleo-manganese steel (Eng.), See manganese alloys, silicon (Chem.), A nonmetallic element, symbol Si, at no. 14, r.a.m. 28,086, valency 4. Amorphous silicon is a brown powder, rel.d. 2,42. Crystalline silicon is grey; rel.d. 2.42, mp 1420°C, bp 2600°C. This element is the second most abundant, silicates being the chief constituents of many rocks, clays and soils. Silicon is manufactured by reducing silics with carbon in an electric furnace, and is used in glass and in making certain alloys,

2. e.g. ferro-silicon. It has semiconducting properly used for a large range of electronic component ellicon bronze (Eng.). A noncorroding alloy copper and tin.

silloon carbide (Chem.). SiC. Formed by fusing a of carbon and sand or silica in an electric fig Acheson furnace). Used as an abrasive and refrac

silicon-controlled rectifier (Electronics). A three semiconductor switching device consisting of a m of p-n-p-n-type materials. It is normally openapplication of an appropriate control signal to allows it to conduct, in one direction only conventional rectifier. It continues to conduct the gate signal removed, until it is reverse biased voltage it is intended to switch. Used in voltage of power circuits.

silicon copper (Eng.). An alloy (20-30% Si) 1 used to remove oxygen from molten copper alk ellicon detector (Telecomm.), Stable silicon crysta

for demodulation.

silicon dioxide (Chem.): Silicon (IV) oxide, See ellicone resins (Build.). A group of resins with p properties which benefit coatings e.g. resistance acids, alkalis, oils, salts and the ability to rep making them useful for masonry water re Silicones are also used in polishes.

ellicone rubbers (Chem.). An important ru synthetic, rubbers (dimethylsiloxene polymen) both high and low temperature resistances beit those for natural rubbers.

silicones (Chem.). Open-chain and cyclic orgin. compounds containing SiR₂O groups mainly by hydrolysing alkyl or aryl silicon de R₂SiCl₂, which are themselves made by the Creaction. The simpler substances are oils of States. melting-point, the viscosity of which changes in temperature, used as lubricants, shock-absorber constituents of polishes etc. More complex sold ucts, stable to heat and cold, and chemically in exceptionally, good; electrical insulators (or c motors etc. Also used in gaskets and a wide vin special applications.

silicon hydrides (Chem.). Sec silanes.

silicon iron (Eng.). Iron or low carbon steel to 0.75-4.0% silicon has been added. Has lowing hysteresis, and is resistant to mild acids. Used for for transformer cores. Typical composition: allow manganese under 0.1%, phosphorus 0.02%

0.02%, carbon 0.05% and a semiconductor (Electronics). A semiconductor rectifier usually based of p-n junction in silicon co silicon resistor (Electronics). A resistor of special material which has a fairly constant positive temper coefficient, making it suitable as a temperature, element, went

allicon tetrachloride (Chem.), Tetrachlorosilane Formed by the action of chlorine on a mixture of and carbon, or silicon. Liquid.

gaseous compound formed by the action of hydro acid on silica. Readily hydrolyses into silical hydrofluoric acid.

silicosis (Med.). Pneumoconiosis, due to the inhalation particles of silica by masons and miners who work presence of silica.

silique (Bot.). A capsule with the general character silicle, but at least 4 times as long as it is broad silique. Tem ins la light to

allk (Min,) A sheen resembling that of silk, exhibits some corundums, including ruby, and due to tubular cavities, or to rutile needles, in parallel of tion, The colour of such stones is paler than nome reason of the inclusions.

slik (Textiles). The protein fibre obtained in continuous fine strands from the cocoon of silkwo especially of the moth Bombyx mori. The thin composed, of fibroin surrounded by another pro

which is Halk (e.g. to moths.

(Zool.). A opoda. It i sericin an pure to air ir pons, webs, e ink is squ othe surfa rial, smoot be prepare ture of both are also use preferred na in opening. brasure etc. (Geol.). A m abular sheet dding planes [Hyd.Eng.). Cnotch. (Min.) e (Mir

high-temp high-grade 1 is a fibrous (Aero.)...l ile which i erconduction of the conduction (Geol.). M Frain-size ticle size. box (Build ottom of a g periodic r inite (E mileting ma rian' (Geo lacozoic, c illion year ibe. The co rian (Paj

irnish. Unc riformes ying Osteid (Chem Cho. 47; r 1955°C, The metal sumes ar al conduct mulsions. ther meta for ornam certain con cheaper m mercury as Of rare or liver dep iyer glan er græk n oak t preparing centre of

Webster's Unabridged Dictionary of the English Language



PORTLAND HOUSE • NEW YORK

, v., -lenced, -lencing, interj und or noise; stillness. 2. the state; muteness. 3. absence or omission picuous silence of our newspaper tate of being forgotten; oblivion years of silence. 5. concealment put or bring to silence; still etc.) to rest; quiet. 8. Milatto a more effective fire. —inter! 9 teacher shouted. [ME < OF

NT, -ENCE] 1. one who or that whifor deadening the report of fill int. the muffler on an interior in the state of th

1. making no sound; quiế நஞ்யு: aining from speech. 3. speecilled to speak; tacitum; reticent sence of speech or sound; all; tacit: a silent assent. 7. onife, as in a narrative: The reconst ie. 8. inactive or quiescent inded or pronounced: The 10. Motion Pictures: noting a sound track: -n. 11. Using [< L silent-(s. of silens); property of the silens); property of the silent-(s. of silens); property of the silens); property of the silens of the silen

See still. 8. dormant

ee dumb barter.

small receptacle having a lite for collecting the contents of dinner table, etc., for dispo ower chain consisting of athur joined by pins and bearing tee teeth on the sprockets with

e, Elect. the gradual disconfiguration of electricity from a sconfiguration of a coronic state of a coronic racteristic of a corona. a novel (1928-40) by MI

a partner taking no active less. Cf. secret partners (sometimes cap.) they subby the).
dumb barter.

the act or an instance, iness toward another percent disapproval, disgust, etcote of persons or groups the preference, as

the oldest of the satyri

and companion of Diony old man with the ears and ted astride a cask or a don't forest spirits similar to sat まる(対方性)動態

a town in central North WILL SHAP



der Polish administration , and other minerals sk. Czech, Slezsko,

/), n., v., -et-ted, -etpresentation of the out utline drawing, unit plack, esp. a black tof the outlines of a

2. the outline of thing: the slim sil-3. a dark image ighter background? s in a silhouette. 5. sential background e cut) so as tomin

silicic acid

liche achd,

licide (sil'i sid', -sid), n. Chem. a compound of two ements, one of which is silicon. [SILIC- + -IDE] licif.er.ous (sil/i sif/ər əs), adj. containing, com-lined with, or producing silica. [SILICI- + -FEROUS]

ilc'ified wood, wood which has been changed it quartz by a replacement of the cellular structure of lawood by siliceous waters.

icify (si lis/e fi/), v.t., v.t., -fied, -fy-ing. to con-for be converted into silica. [SILIC- + -IFY] or be converted

Licie (sil'i kəl), n. Bot. a short silique. [< L silicul(a) ico-, var. of silic-: silicomanganese.

Con (sil/e ken, -kon/); n. Chem. a nonmetallic elein thaving amorphous and crystalline forms; occurring
combined state in minerals and rocks and conthe state in innersis and rocks and continuing more than one fourth of the earth's crust; used fiel-making, alloys, etc. Symbol: Si; at. wt.: 28.086; 20.114; sp. gr.: 2.4 at 20°C. [SILIC- + -on, modeled]

Chem. a very hard, insoluble, ctalline compound, SiC, used as an abrasive and as an abrasive and as an trical resistor in objects exposed to high tempera-**新**拉 海点

den dioxide, Chem. silica.

Teone (sil's kon'), n. Chem. any of a number of mers containing alternate silicon and oxygen atoms. yners containing alternate silicon and oxygen atoms, fsi-O-Si-O-), whose properties are determined by lorganic groups attached to the silicon atoms, and the fillid; resinous, rubbery, extremely stable in temperatures, and water-repellent: used as adheliubricants, and hydraulic oils and in electrical libricants, etc. [silic-+-one]

icon tetrachlo/ride, Chem. a colorless, fuming id sills, used chiefly for making smokescreens and derivatives of silicon.

con tetraflu/oride, Chem. a colorless, fuming slive used chiefly in the manufacture of fluosilicic

on Val/ley, an area just south of San Francisco, is isanta Clara Valley, where many computer firms cated in from the silicon wafers used in semi-

0:818 (sil/ə kō/sis), n. Pathol. a disease of ings caused by the inhaling of siliceous , as by stonecutters. [SILIC-sil-i-cot-ic (sil/ə kot/ik), adj.

Wiose (si lik/yə lōs/), adj. Bot. 1.

Railicles. 2. having the form or appeloi of a silicie. [< NL siliculos(us).

McLE, osel]

Lorent Street St

its) See silique, -ose j its) In: #1. the soft, lustrous fiber diss a filament from the cocoon of liverm. 2. thread made from this fiber. 4. Silique of plant, and peaked cap; considered together, senus brassica with of such material worn distinc-

of such material worn distinctions of Queen's Counsel at the English Ming's or Queen's Counsel at the English Lany fiber, or filamentous matter resembling offlament produced by certain spiders, the mollusk, or the like. 8. the hairlike styles to mollusk, or the like. 8. the hairlike styles be not be for corn. 9. Brit. Informal. a. a King's or Counsel. b. any barrister of high rank. 10. iIF, Slang. to parachute from an aircraft; bail a hrill to see hundreds of men hitting the silk. Ilk, Brit. to become a Queen's or King's add; 12. made of silk. 13: resembling silk; of or pertaining to silk. —v. 1. 15. (of corn) becourse of developing silk. [ME: OE sioloc, Coll., silki) < Baltic or Slav; cf. OPruss shelk. < Gk sērikon silk, n. use of neut. [In the cotton fabric silk] (sil/kə lēn/), n. a soft, thin cotton fabric silk/kə lēn/), n. a soft, thin cotton fabric

(sil/kə lēn/), n. a soft, thin cotton fabric

Silicic acid

licic acid, Chem. any of certain amorphous printed with silkscreen. [SILK + SCREEN printed with silkscreen. [SILK + SCREEN printed with silkscreen. [SILK + SCREEN silk-stock.ing (silk/stok/ing), adj. 1.

Chem a compound of two neighborhood. —n. 3. one who dresses reconstruction outsily. 4. an aristocratic or wealthy personal contents of the silkscreen. silk' tree', a tree, Albizzia julibrissin Iran to central China, having light-pink flowers. silk-weed (silk/wed/), n. any milkweed of the family Asclepi-adaceae, the pods of which contain

a silky down. [SILK + WEED1] a sliky down. [SILK + WEED!]

silk worm. (silk/wurm/), n.

1. the larva of the Chinese silkworm moth, Bombyx mori, which
spins a cocoon, of commercially
valuable silk. 2. the larva of any
of several moths of the family
Saturnitiae, which spins a silken
cocoon. [ME sylkewyrme, OE seolcwyrm. Si
silk/worm moth/ any of several moth

silk/worm moth/, any of several mot lies Bombycidae and Saturniidae, the larva silkworms.

silk·y (sil/kē), adj. silk·i·er, silk·i·est. silk; smooth, lustrous, soft, or delicat 2: Bot. covered with fine, soft, closely set 1 [SILK + -Y1] —silk/i·ly, adv. — --silk/i∙n: silk/y ant/eater anteater, Cyclopes didactylus, about the having a prehensile tail, glossy, golden fur on each forelimb. Also called two-toed an silk/y camel/lia, a shrub, Stewartia dron, of the southeastern U.S., having ha leaves and white flowers nearly four inches silk/y cor/nel, a cornel, Cornus Ame eastern U.S., having leaves covered with

hairs on the underside. silk/y fly/catcher, any of several per of the family Ptilogonatidae, of the southwer Panama, related to the waxwings.

silk/y oak/. See silk oak.

silk/y oak/. See silk oak.

sill (sil), n. 1. a horizontal timber, block serving as a foundation of a wall, house, horizontal piece or member beneath a wind other opening. See diag, under double-hu a tabular body of intrusive igneous rock, o tween beds of sedimentary rocks or layer ejecta. [ME sille, OE syl, sylle; c. LG still, I to Icel svill, G Schwelle] —sill-like/, adj.

sil·la·bub (sil/e) bub/), n. a drink or dish r or cream mixed with wine, cider, or the sweetened and flavored. Also, sil/li-bub/

Sil·lan·pää (sil/län pa/), n. Frans Ee e/mil), 1888–1964, Finnish author: Nobel p sill-cock (sil/kok/), n. hosecock. [SILL - called from the fact that it is often attached at about the height of a sill] sil-ler (sil/ər), n. Scot. silver.

sil·li·man·ite (sil/ə mə nit/), n. a mineral silicate, AlaSiOs, occurring in the form of lo and often fibrous crystals. Also called fibroli after Benjamin Silliman (d. 1864), American (geologist; see -ITE1]

geologist; see -ITE¹] **sil·ly** (sil/ē), adj., -li·er, -li·est, n., pl. -li

1. weak-minded; lacking good sense; stupid c

silly writer. 2. absurd; ridiculous; irrational:

3. Informal. stunned; dazed: He knockea

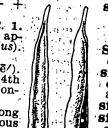
4. Cricket. (of a fielder or his playing position)
close to the batsman's wicket: silly mid of
rustic; plain; homely. 6. Obs. lowly in ranh
humble. 7. Archaic. weak; helpless. -n. 8.

silly or foolish person: Don't be such a silly
silly happy, innocent, weak, OE (Anglian) sēlis
sēl, sæl happiness + -ig -y¹; c. G selig] —sil

-Syn. 1. witless, senseless, dull-witted, dim-w foolish. 2. inane, asinine, nonsensical, prej

sil'ly bil'ly, a clownish person. sil/ly sea/son, a time of year, usually in mi or during a holiday period, characterized by exnews stories, frivolous entertainments, outlander the search of licity stunts, etc.: The new movie reminds us the season is here.

st-10 (si/10), n., pl. -los, t., -loed, -lo-ing. structure, typically cylindrical, in which forage is kept. 2. a pit or underground space for grain, green feeds, etc. 3. Mil. an underground stallation constructed of concrete and stallation.



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